ENVIRONMENTAL ASSESSMENT

PREPARED IN ACCORDANCE WITH FLATHEAD COUNTY SUBDIVISION REGULATIONS, APPENDIX C

for

LOWER VALLEY RANCHETTES

On property located at 52 Swan View Road N, Kalispell, MT legally described as Tract 1, COS 17529 in Section 8, T27N, R20W, PMM, Flathead County

Published: May 8, 2020

Prepared For: Sandy O' Connell 2727 Lower Valley Road Kalispell, MT 59901



Prepared By: 406 Engineering, Inc. 35 8th Street East Kalispell, MT 5990

APPLICABILITY

The proposed Lower Valley Ranchettes subdivision proposes to divide the existing parcel into five lots. The total property acreage is 83.9 acres and the new lots will range in size from 10.18 acres to 21.19 acres. All lots are proposed for single-family residential development.

The proposed subdivision is defined as a major subdivision per the Flathead County Subdivision Regulations and therefore the applicant must complete an environmental assessment which meets the requirement of Appendix C of the Flathead County Subdivision Regulations. This environmental assessment has been prepared in direct correlation to the requirements of the Flathead County Subdivision Regulations, Appendix C. The requirements of the appendix are provided in normal font and the responses to each item are provided in <u>underlined font</u>.

GENERAL INSTRUCTIONS

It shall be the responsibility of the subdivider to submit the information required by this Section with the preliminary plat. This Environmental Assessment format shall be used by the applicant in compiling a thorough description of the potential impacts for the proposed subdivision. Each question pertinent to the proposal must be addressed in a full comprehensive and systematic fashion (both maps and/or text as applicable). Incomplete Environmental Assessments will not be accepted.

The Environmental Assessment will be objectively measured to assure that all mandatory elements are included and that, based upon objective standards, all prospective impacts are adequately addressed. At a minimum, the Environmental Assessment must contain the following for all assessment contents:

- A summary of probable impacts and statement of impact for each environmental consideration topic;
- b. A discussion to support the statement of impact;
- c. Referenced sources and citations to support the statement of impact;
- d. If applicable, site specific maps and documentation to support the statement of impact and discussion.

If, at any time during the application process, material information comes to light that is not addressed in the Environmental Assessment, the subdivider shall be required to amend the Environmental Assessment to adequately address the issue. In this event the 60 working day review period is suspended and will not resume until the amended Environmental Assessment has been submitted, reviewed and approved by the Planning and Zoning Office. Following review and acceptance of the amended Environmental Assessment, the application review process will resume at the same stage of the 60 working day review period that the original application was at before the additional information came to light.

ENVIRONMENTAL ASSESSMENT CONTENTS

There are two major sections to the Environmental Assessment. The first section incorporates the natural system provisions of 76-3-603 and 76-3-608, MCA. The second section evaluates the impacts to the human community and incorporates 76-3-608 (3)(a) criteria for public health, safety and local services. The sources of information for each section of the Assessment shall be identified. All Environmental Assessments shall contain the signature, date of signature and mailing address of the owner of the property and the person, or persons, preparing the report and citation and a copy of all supporting information.

SECTION 1 - RESOURCE ASSESSMENT AND IMPACT CRITERIA REPORT

- a. Surface Water:
- i. Locate on the preliminary plat and describe all surface water and the delineated 100-year floodplain(s) which may affect or be affected by the proposed subdivision including:

 There are no surface waters or floodplains within the subdivision. The property is located over one half of a mile away from the nearest surface water, which is Flathead River to the east. Flathead River can be seen on the USGS map attached with this Environmental Assessment (EA)
 - A. All-natural water systems such as perennial and intermittent streams, lakes and ponds, rivers, or marshes;
 - There are no natural water systems on the property.
 - B. All artificial water systems such as canals, ditches, aqueducts, reservoirs, irrigation or drainage systems;
 - There are no artificial water systems on the property.
- ii. Describe all probable impacts to surface waters which may affect or be affected by the proposed subdivision including name, approximate size, present use, and time of year when water is present and proximity of proposed construction (e.g. buildings, sewer systems, roads) to surface waters;
 - There is one nearby surface water. The Flathead River is over one half of a mile to the east.

Environmental Assessment Page 2 of 17



None of the above described water bodies should be affected by the proposed subdivision. The common affect evaluated with subdivisions on water bodies is from storm water or sewage disposal from the drainfields. Those potential affects will be evaluated as part of the Department of Environmental Quality review of this subdivision. However, based on their distance from the subject property as well as the requirements of land development projects by the DEQ, it is unlikely that there will be any effects on these water bodies as a result of this subdivision.

- iii. Describe any existing or proposed stream bank or shoreline alterations or any proposed construction or modification of lake beds or stream channels. Provide information on location, extent, and purpose of alteration. If any construction or changes are proposed which require a 310 Permit from the Flathead County Conservation District the subdivider shall acknowledge that the permit is required and will be obtained prior to final plat;

 There are no existing or proposed stream bank or shoreline alterations or any proposed construction or modification of lake beds or stream channels as part of this subdivision. The property does not contain any surface water for such alterations to occur.
- iv. If wetlands are present, the subdivider shall identify and provide a map showing wetland areas. A wetlands investigation completed by a qualified consultant, using the most current U.S. Army Corps of Engineers' Wetlands Delineation Manual may be required. If any construction or changes are proposed which require a 404 Permit, the subdivider shall acknowledge that the permit is required and will be obtained.

 The project is on a level area of the Flathead Valley floor. There are not any surface water or other features that are conducive to create a wetland environment. The property does not contain wetlands.

b. Ground Water:

- i. Establish the seasonal minimum and maximum depth to water table, dates on which these depths were determined, and the location and depth of all known aquifers which may be affected by the proposed subdivision. Monitoring may be waived if evidence of minimum and maximum ground water elevations can be documented;

 Recent test pits completed on the subject property in April of 2020 (high groundwater season) did not exhibit any signs of ground water within the 8-foot depth of the test pit.

 Adjacent well logs within this section, township, and range as obtained from the Montana Bureau of Mine Groundwater Information Center website indicate a possible groundwater depth of 6' to 33' below the surface. The Lower Valley Ranchettes subdivision will not be required to complete ground water monitoring.
- ii. If determined from subsection (b)(i) above that any area within the proposed subdivision is within four feet of the surface, the high water table shall be measured from tests taken during the period of the highest groundwater elevations, generally from March 15 through June 30, during average precipitation years and reported in the environmental assessment; Ground water is not expected to be within four feet of the ground surface. The test pits that were completed for this subdivision on April 26th did not show signs of ground water within 8 feet of the ground surface. There is no evidence that additional ground water monitoring is needed.

Environmental Assessment Page 3 of 17

iii. Describe any steps necessary to avoid probable impacts and the degradation of ground water and ground water recharge areas as result of the subdivision.

There are no steps needed to avoid probable impacts and the degradation of ground water or ground water recharge areas as a result of this subdivision. The developer should follow all regulatory requirements related to installation of wells, sewage systems, and storm water facilities.

c. Geology/Soils:

- i. Locate on the preliminary plat any known geologic hazards affecting the subdivision which could result in property damage or personal injury due to rock falls or slides, mud, snow; surface subsidence (e.g., settling or sinking); and seismic activity;

 There are no known geologic hazards affecting the subdivision to show on the preliminary plat. The property is located on a level area of the Flathead Valley floor with stable soils.

 None of the property shows signs of dangers for rock falls, slides, mud slides, avalanches, or subsidence. This area of Montana is located in a seismic zone, Zone 3, but the property is not located on a known fault line as shown on Plate 1: Historical Seismicity (1809 to 2001), Quaternary Faults, and Regional Seismic Source Zones map¹.
- ii. Explain what measures will be taken to prevent or materially lessen the danger and probable impacts of future property damage or personal injury due to any of the hazards referred to above;

 There are no known or identified hazards and therefore no mitigation measures are proposed.
- iii. Explain any unusual soil, topographic or geologic conditions on the property which limit the capability for building or excavation using ordinary and reasonable construction techniques. The explanation should address conditions such as shallow bedrock, high water table, unstable or expansive soil conditions, and slope. On the preliminary plat identify any slopes in excess of 40 percent;

 There is no unusual soil, topographic, or geologic conditions on the property which limit the capability for building or excavation using ordinary and reasonable construction techniques. The soils are predominately silty clay loam as shown on the USGS Soils Survey map, which provide for acceptable construction conditions. High ground water is not present, and the soils are stable without expansive characteristics such as those exhibited in fat clay soils. The slope of the site is mostly flat with slopes of about 1-4% across the site. No slopes exceed 10% anywhere on the property.
- iv. Identify any soils constraints, including probable impacts due to expansive soils, hydric soils, or any soils which limit sanitary facilities. Explain special design considerations and methods needed to overcome the soil limitations;
 There are no expansive soils or hydric soils that limit sanitary facilities. Soil test pits have been completed at each of the proposed home sites for on-site septic systems with adequate soils identified for disposal of sewer effluent. See also the attached USDA soils map and soil descriptions.²

Environmental Assessment Page 4 of 17

http://dnrc.mt.gov/divisions/water/operations/docs/dam-safety/technical-references/seismic-maps/plate 01.pdf

² https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

v. Describe the location and amount of any cut or fill three or more feet in depth. These cuts and fills should be indicated on a plat overlay or sketch map. Where cuts or fills are necessary, describe any plans to prevent erosion and to promote re-vegetation such as replacement of topsoil and grading.

There are no planned construction improvements that would amount to cuts and fills in excess of three or more feet as part of the subdivision. The site is mostly level with only minimal changes in topography at gentle slopes. No specific or special requirements to address cuts and fills over three feet are necessary for this subdivision.

d. Vegetation:

- i. On a sketch map or aerial photo indicate the distribution of the major vegetation types such as marsh, grassland, shrub, coniferous forest, deciduous forest, mixed forest, including critical plant communities such as stream bank or shore line vegetation; vegetation on steep, unstable slopes; vegetation on soils highly susceptible to wind or water erosion; There are no critical plant communities that have been identified. An aerial photograph is attached with this report.
- ii. Identify any locations of noxious weeds and identify the species of weeds and explain measures to control weed invasion;

 The property likely contains some spotted knapweed (centaurea maculosa), which is a common noxious weed in Montana. A Weed Control Plan will be required as a condition of approval of the subdivision. Property owners should also undertake weed control measures on their property in accordance with state statute, MCA 7-22-2116.
- iii. Describe any probable impacts and any protective measures to preserve trees and critical plant communities (e.g., design and location of roads, lots and open spaces).

 There are no critical plant communities identified on the subject property. The lots have been designed to accommodate likely building site locations.

e. Wildlife:

- i. Describe species of fish and wildlife which use the area affected by the proposed subdivision;
 - The subdivision does not contain any surface water so no species of fish will be affected by the development. The Montana Natural Heritage Program (MTNHP) provided a list of Species of Concern which is attached with this report. The list of species is extensive because western Montana has lots of wildlife species and it is within a mile of the Flathead River. However, the subject property does not contain any features that would affect fish species.
- ii. Identify on the preliminary plat any known critical or "key" wildlife areas, such as big game winter range, waterfowl nesting areas, habitat for rare or endangered species, or wetlands; The property has not been identified as having any "key" wildlife areas. The portions of the MTNHP report attached to this environmental assessment includes a wide range of species that may be observed in the area of the subdivision. However, in review of the MTNHP report, most of the species are more isolated to the river corridor of the Flathead River.

Environmental Assessment Page 5 of 17

- iii. Identify rare and endangered species on-site. Describe the impact(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement;

 The Montana Natural Heritage Program identified several species of special concern as occurring within the section, township, and range of the proposed subdivision. Given the proximity of the subdivision to the Flathead River, it makes sense that the listed species may be present within 1 miles of the subdivision. However, this subdivision is located adjacent to large tracts of agricultural farmland with sparse housing. The impacts on the environment have largely already occurred and it is unlikely the listed species inhabit the property at this time. To mitigate any potential impacts, the developer will incorporate any living with wildlife covenants recommended by the MT FWP.
- iv. Describe any probable impacts and proposed measures to protect or enhance wildlife habitat or to minimize degradation (i.e. keeping buildings and roads back from shorelines; setting aside marshland as undeveloped open space);
 This parcel has no existing development with the exception of the private roadways along the north and west property boundaries. It is also immediately adjacent to a 7-lot subdivision to the west with 10-acre sized parcels, and a 4-lot subdivision to the south with 5-acre sized parcels. There is no wildlife habitat to protect or enhance. Other measures could include adoption of covenant restrictions addressing living with wildlife as guided by Montana Fish Wildlife and Parks.
- v. It is recommended that the subdivider discuss the impact of the proposed development on fish and wildlife with the Department of Fish, Wildlife and Parks (FWP) and incorporate any recommendations from the agency to mitigate wildlife impacts.
 The FWP was not contacted for comment on this subdivision since the project is unlikely to have significant impacts to fish, wildlife, or wildlife habitat. However, it is common for FWP to recommend living with wildlife covenants be incorporated into the development covenants of a rural subdivision. The developer will collaborate with FWP on appropriate covenants that are considered best management practices for living with wildlife.

f. Wildlife Habitat:

- Proposed subdivisions that are contiguous to urbanized areas are presumed to have a minimal impact on wildlife habitat;
 The proposed subdivision is not contiguous to an urbanized area.
- ii. Proposed subdivisions in locations with riparian areas, wetlands, rivers, streams, lakes, or other natural surface waters are presumed to have an impact on wildlife habitat. Describe the impact(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement;

 The proposed subdivision is not located in riparian areas, wetlands, rivers, streams, lakes, or other natural surface water.
- iii. Proposed subdivisions in an area with rare or endangered species, as identified by state or federal agencies, are presumed to have an impact on the habitat of those species. Describe the impact(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement;

Environmental Assessment Page 6 of 17

The Montana Natural Heritage Program was contacted to identify species of special concern. They provided a list of species that either have been identified to live in the area of this subdivision or could be found in this area including the Grizzly Bear and Bald Eagle. The impacts on any rare or endangered species is anticipated to be low because the project is immediately adjacent to County road and existing open agricultural land. Adjacent property has also already been developed with homes and mostly devoid of trees except for some landscaping trees around the homes. Thus, any impacts on rare or endangered species have largely already occurred. However, the developer will incorporate living with wildlife covenants as recommended by MT FWP as mitigation for any potential impacts on wildlife and wildlife habitat.

iv. Proposed subdivisions on and or adjacent to land identified by state or federal agencies as critical habitat are presumed to have an impact on wildlife habitat. Describe the impact(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support that statement.

No agency has identified the subdivision area or adjacent land as critical habitat. No impact on wildlife habitat is expected. If mitigation for any potential impact is deemed necessary, it will likely include living with wildlife covenants as recommended from the FWP.

g. Agriculture and Timber Production:

- i. On a sketch map locate the acreage, type and agricultural classifications of soils; The attached USGS Soils Survey map by the USDA show the approximate acreage and type of soils predicted to be on the property. About three-fourths of the acreage contains soils listed on the USDA soils web survey⁴ as "Prime farmland in irrigated". The remaining acreage is listed by the USDA as "Not prime farmland". This property is not irrigated. Despite the classification by the USDA, the property has been used in agricultural production for decades. However, the subdivision will create new parcels that are large enough to continue agricultural production.
- ii. Identify and explain the history of any agricultural production of the by crop type and yield; The exact history of agricultural production on the property is unknown. However, given the property location in the valley and surrounding agricultural uses, this property has likely been used for agricultural production for many decades. The property is currently in alfalfa hay production with yields common for dryland alfalfa production in the Flathead Valley. Although the land is proposed to be divided, the proposed lot sizes are of sufficient size to allow for continued agricultural use of most of the property.
- iii. Describe the historical and current agricultural uses which occur adjacent to the proposed subdivision and explain any probable impacts and measures which will be taken to avoid or limit development conflicts with adjacent agricultural uses;

 The property to the east and north is agricultural land as is much of the Lower Valley area of the Flathead Valley. The subdivision is not anticipated to have any specific development conflicts with the agricultural land, although conflicts can occur when residential development occurs next to agricultural land. The developer will be advised to incorporate in the covenants a notification to future property owners of adjacent agricultural activities.

Environmental Assessment Page 7 of 17

³ http://fwp.mt.gov/gis/maps/caps/ and https://ecos.fws.gov/ipac/location/index

https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

The notification is intended to mitigate any potential conflicts such as residences complaining about noise, dust, and smells generated from agricultural operations.

 iv. If timbered, identify and describe any timber management recommendations which may have been suggested or implemented by a professional forester.
 The property does not contain any timberland, so no action is deemed necessary.

h. Agricultural Water User Facilities:

- i. On a sketch map or aerial photo locate the location of any agricultural water user facility, including but not limited to agricultural water works, wells, canals, irrigation ditches and pump houses on-site or adjacent to the proposed subdivision;
 There are no agricultural water user facilities including agricultural water works, wells, canals, irrigation ditches or pump houses on the property.
- ii. Describe any agricultural water user facility on the site or in proximity that might be affected and explain any probable impact(s) and measures which will be taken to avoid or mitigate probable impacts;
 As mentioned above, there are no agricultural water user facilities including agricultural water works, wells, canals, irrigation ditches or pump houses on the property. Existing agriculture activities are anticipated to remain until home sites are built, there should be no impact on the subdivision during the transition.
- iii. It is recommended that the subdivider discuss any impact of the proposed development on agricultural water users' facilities with the irrigation company or organization controlling the facility and incorporate any recommendations from the agency to mitigate agricultural water users impacts.
 Since there are no agricultural water user facilities on the property, no discussions on impacts with irrigation companies or organizations are needed for this subdivision.

Historical Features:

- Describe and locate on a plat overlay or sketch map any known or possible historic, paleontological, archeological or cultural sites, structures, or objects which may be affected by the proposed subdivision;
 The subject property contains no existing structures or evidence of any provious structures.
 - The subject property contains no existing structures or evidence of any previous structures. The State Historic Preservation Office (SHPO) was contacted for comment on the subdivision. SHPO has no record of any historical or culturally significant use on the subject property.
- ii. Describe any plans to protect such sites or properties;
 There are no historic or culturally significant sites or structures on the property, and therefore there are no plans for protecting historical sites.
- iii. Describe the impact of the proposed subdivision on any historic features, and the need for inventory, study and/or preservation and consultation with the State Historic Preservation Office (SHPO).
 - SHPO was contacted regarding any cultural or historic features. SHPO responded (Project #2020040105) stating that a search of their records did not show any historic, archaeological

Environmental Assessment Page 8 of 17

<u>or cultural sites located on the property. SHPO did not recommend that the developer conduct a cultural study of the property. A copy of the SHPO correspondence is attached with this report.</u>

j. Visual Impact:

i. Describe any efforts to visually blend development activities with the existing environment. The proposed subdivision will create 5 residential lots with lot sizes from 10.18 acres to 21.48 acres. The proposed homesites are expected to be of the same scale and nature with the existing homesites to the south and west of this project, which has lot sizes of 5-10 acres. The density is compatible with the surrounding area and is intended to blend with home style and sizes established by adjacent homesites.

k. Air Quality:

i. Describe any anticipated impact to air quality caused from dust or other air pollutants, including dust created from roads, and any means to mitigate the impact to air quality. The proposed subdivision will include generate five additional residential homes, which will be accessed via an existing roadway network. All access roads are paved, Swan View Road North and Tango Fox Lane are governed by private road maintenance agreements and the owners intend to provide dust abatement for these rural roads serving a total of five homes if needed. A dust control plan has been included with the subdivision application and may be a requirement of the conditions of approval. The dust control plan identified measures to mitigate dust impacts to air quality.

I. Area Hazards:

- i. Describe and locate on a plat overlay or sketch map any hazardous concerns or circumstances associated with the proposed subdivision site, including, but not limited to:
 - A. Any part of the proposed subdivision that is located within the Wildland Urban Interface priority area. If located in the Wildland Urban Interface or high fire hazard area identified by a local fire district or fire protection authority describe probable impact(s) and measures to mitigate the impact(s), or submit a statement explaining why no impact is anticipated, providing documentation to support the statement;

 The subdivision is not located within the Wildland Urban Interface⁵ and thus no impact is anticipated.
 - B. Any potential hazardous materials contained on site, including high pressure gas lines, high voltage transmission lines, super fund sites, abandoned landfills, mines or sewer treatment plants, etc. In some cases, an Environmental Site Assessment may be required;
 - <u>There are no hazardous concerns or circumstances as listed above that are located on or adjacent to this subdivision.</u>
 - C. Describe measures to mitigate any adverse impacts associated with area hazards.

Environmental Assessment Page 9 of 17

⁵ http://maps.flathead.mt.gov/ims/default.aspx

There are no hazardous concerns or circumstances that are located on or adjacent to this subdivision and thus no measures to mitigate adverse impacts are proposed.

SECTION 2 - COMMUNITY IMPACT REPORT

- a. Water Supply:
 - i. Describe the proposed water system and how water will be provided for household use and fire protection and the number of gallons needed to meet the needs of the anticipated final population;
 - The homes will be served by five new individual wells located on each of the respective lots. There are no proposed water supplies for fire protection. Each home is predicted to utilize about 200 gallons per day on average for domestic service. The irrigation use for each home is estimated to be about 1350 gallons of water per day (15 gpm for 1.5 hours each day).
 - ii. Indicate whether the plans for water supply meet state standards for quality, quantity and construction criteria.
 - The plans to serve the subdivision with individual water systems is a common project approach. Water sampling indicates acceptable water quality. Surrounding well logs show adequate water availability as shown on the attached Water Availability spreadsheet obtained from information from the Ground Water Information Center website.⁶ As such, the individual wells will meet the Montana Department of Environmental Quality standards for quality and quantity. The wells will also meet statement requirements for construction criteria established for all licensed well drillers by the state.
 - iii. If the subdivider proposes to connect to an existing water system: The subdivider does not propose to connect to an existing water system.
 - Identify and describe that system;
 - B. Provide written evidence that permission to connect to that system has been obtained;
 - C. State the approximate distance to the nearest main or connection point;
 - D. State the cost of extending or improving the existing water system to service the proposed development;
 - E. Show that the existing water system is adequate to serve the proposed subdivision.
 - iv. If a public water system is to be installed, discuss: A public water system is not proposed to be installed.

- A. Who is to install that system and when it will be completed;
- B. Who will administer and maintain the system at the beginning of subdivision development and when subdivision is completed;
- C. Provision of evidence that the water supply is adequate in quantity, quality, and dependability (75-6-101 MCA).
- v. If individual water systems are to be provided, describe the adequacy of supply of the ground water for individual wells or cisterns and how this was determined.

⁶ http://mbmggwic.mtech.edu/

<u>Individual water systems are proposed for this subdivision.</u> Surrounding well logs indicate an adequate water supply. Water samples indicate adequate water quality.

b. Sewage Disposal:

- Describe the proposed method of sewage disposal and system;
 The lots will be used for single-family residences that will dispose of sewer via on-site pressurized sewage treatment systems (septic tank and drainfields).
- Indicate the number of gallons of effluent per day which will be generated by the proposed subdivision at its full occupancy, whether the proposed method of sewage disposal is sufficient to meet the anticipated final needs of the subdivision and whether it meets state standards;
 - Each lot will generate an average of 200 gallons per day of effluent or 1,000 gallons total for the subdivision. The method of sewage disposal is sufficient and will be required to show that it meets state standards prior to filing of the Final Plat for the subdivision.
- iii. If the development will be connected to an existing public sewer system, include: The subdivider does not propose to connect to an existing public sewer system.
 - A. A description of that system and approximate distance from the nearest main or connection point to the proposed subdivision;
 - B. Written evidence that permission to connect to that system has been obtained.
- iv. If a new public sewage disposal system, as defined under 75-6-102 MCA, is to be installed, discuss:

A public sewer system is not proposed to be installed.

- A. When the system will be completed, and how it will be financed;
- B. Who is to administer and maintain the proposed system at the beginning of subdivision development and when development is completed?

c. Storm Water Drainage:

- Describe the proposed methods of storm water drainage for roads and other anticipated impervious surfaces, including storm water calculations;

 The subdivision is located on level ground with silty clay loam soil types allowing for infiltration of storm water. A storm drainage report has been prepared and is included with the preliminary plat application for this subdivision. The methods used to mitigate storm water generated from impervious surfaces will include construction of lawn and landscaping, retention facilities near homesites, and diversion of storm water from impervious surfaces to undisturbed areas. Storm water calculations are included in the storm water report included in the preliminary plat application.
- ii. Describe the proposed methods of storm water drainage for other areas of the subdivision, including storm water calculations;
 The methods of storm water drainage for other areas of the subdivision will include those measures described in the above section c.i. The calculations for storm water are included

Environmental Assessment Page 11 of 17

in the storm water report included with the preliminary plat application.

iii. Identify the mechanism and who is responsible for the maintenance of the storm water drainage system.

The Department of Environmental Quality (DEQ) approval for the subdivision will be the mechanism to require maintenance of the storm water facilities for the lots subject to DEQ review. The person responsible for maintenance of the storm water facilities will be the individual property owners.

d. Solid Waste Disposal:

- Describe the proposed system of solid waste collection and disposal for the subdivision including:
 - A. Evidence that existing systems for collection and facilities for disposal are available and can handle the anticipated additional volume;
 The Flathead County Landfill will receive solid waste. Evergreen Disposal or Republic Services will provide contract hauling of solid waste.
 - B. A description of the proposed alternative where no existing system is available.

 No proposed alternative is needed. A contract hauler will dispose of solid waste to the County landfill.

e. Roads:

- Describe any proposed new public or private access roads or substantial improvements of existing public or private access roads;
 - There are no new proposed private or public roads proposed as part of this subdivision.

 No improvements to the existing roadway network are necessary to adequately serve this subdivision. A variance is proposed for the width of Tango Fox Lane and Swan Valley Road North due the low traffic volumes on that road.
- ii. Discuss whether any of the individual lots or tracts have access directly to arterial or collector roads; and if so, the reason access was not provided by means of a road within the subdivision;
 - All lots within the subdivision will have access to existing private roads. No lots will have direct access to Lower Valley Road.
- iii. Explain any proposed closure or modification of existing roads.

 There is no proposed closure or modification to existing roads as a result of this subdivision.
- iv. Identify existing primary road Average Vehicle Traffic and subdivision daily vehicle traffic assigned to that primary road.
 The most recent Average Daily traffic for Lower Valley Road available from the County website is 381 trips per day as reported in 2011. It is likely that the road counts have increased over the past 9 years. This subdivision will generate an estimated additional 50 trips per day.
- v. Describe provisions considered for dust control on roads;

 <u>A dust control plan has been created for the proposed subdivision that addresses dust control during construction of the residences on the subdivision lots. All of the access roads</u>

AUG 2 4 222

are paved such that provisions for dust control on roads will be minimal.

- vi. Indicate who will pay the cost of installing and maintaining dedicated and/or private roadways;
 - There are no proposed roadways. The maintenance of the private roadways serving the subdivision will be provided via existing private roadway maintenance agreements. Lots 1-3 are access via Tango Fox Lane. Lots 4 and 5 are accessed via Swan View Road and Swan View Road North.
- vii. Discuss how much daily traffic will be generated on existing local and neighborhood roads and main arterial, when the subdivision is fully developed;

 The daily traffic generated on the existing local and neighborhood roads and main arterial when the subdivision is fully developed will be an additional 50 trips per day based on 10 trips per day per lot. Given the existing roadway network and configuration of the subdivision, Tango Fox Lane (a private road) will have a total of 70 trips per day on it at full development (30 trips from this subdivision and 40 trips from adjacent parcels). Swan View Road and Swan View Road North (both private roads) will have a total of 120 trips per day (20 trips from this subdivision and 100 trips from adjacent parcels). The total combined trips from the subdivision will be 50 trips added to Lower Valley Road, a county paved road.
- viii. Indicate the capacity of existing and proposed roads to safely handle any increased traffic. Describe any anticipated increased maintenance that will be necessary due to increased traffic and who will pay the cost of maintenance;

 All roadways are existing with widths of at least 18 feet. Based on accepted industry guidelines for design of roadways combined with the anticipated traffic volumes on the roadways, the existing roads are sufficient to handle the existing and additional traffic loads as a result of this subdivision. The increase in maintenance as a result of this subdivision will be minimal, but it will be paid for by the County for Lower Valley Road. The new lots will contribute to the county tax base. The increase in maintenance on Tango Fox Lane, Swan View Road, and Swan View Road North will be paid privately in accordance with the private road maintenance agreements.
- ix. Explain whether year-round access by conventional automobile will be available over legal rights of way to the subdivision and to all lots and common facilities within the subdivision. Year-round access by conventional automobile will be available over legal rights of way to the subdivision and to all lots within the subdivision. The State maintains Highway 82, the county maintains Lower Valley Road, and the lot owners subject to the private road maintenance agreements for Tango Fox Lane, Swan View Road, and Swan View Road North will maintain year-round access to the residences. Individual property owners will maintain their driveways.

f. Utilities:

- i. Include a description of:
 - A. The method of furnishing electric, natural gas or telephone service, where provided; Flathead Electric has overhead electrical lines along Lower Valley Road. CenturyLink also has buried telephone lines along Lower Valley Road. Natural gas in not known to be available in this area.

Environmental Assessment Page 13 of 17



<u>also has buried telephone lines along Lower Valley Road.</u> Natural gas in not known to be available in this area.

- B. The extent to which these utilities will be placed underground;

 All new utility lines installed to serve the subdivision will be placed underground.
- C. Estimated completion of each utility installation.

 <u>Utilities will be installed before filing of the Final Plat unless a subdivision improvement agreement is created between Flathead County and the developer. Utilities will be installed as part of the other infrastructure improvements such as the road construction to serve the subdivision.</u>
- g. Emergency Services:
 - i. Describe the emergency services available to the subdivision such as:
 - A. Is the proposed subdivision in an urban or rural fire district? If not, will one be formed or extended? In absence of a fire district, what fire protection procedures are planned? The subdivision is located in the Somers/Lakeside Rural Volunteer Fire District that serves Somers, Lakeside, and the Lower Valley. The new Somers/Lakeside firehall is located about 7 miles from the subdivision.
 - B. Police protection;

The proposed subdivision will be served by the Flathead County Sheriff's Office.

Chapter 7, Part 4, of the Flathead County Growth Policy states that the Sheriff's Office has six divisions with 118 employees of which 48 are "on the ground" law enforcement officers responsible for the unincorporated portions of the County. The Sheriff's Office runs three shifts in a 24-hour period with 4 to 6 officers on duty each shift.

C. Ambulance service/Medical services;

<u>Ambulance service might be available from Somers Rural Fire, but that was not investigated for this report. The Kalispell regional hospital and emergency services are located on Highway 93 about 13 miles away.</u>

D. Give the estimated response time of the above services;

The estimated response time for each emergency service is as follows:

- Fire: 5 minutes
- Police: Depends on where deputies are located in the county
- Ambulance: 20 minutes
- E. Can the needs of the proposed subdivision for each of the above services be met by present personnel and facilities?

The subdivision is only 5 lots and is on property located adjacent to other similar residential development uses and is overall in an easily accessible location in the County with access via Lower Valley Road. The needs of the subdivision will not pose a significant increase in demand for services and the surrounding area appears to be being adequately served by emergency services. As such, it is logical to conclude the needs of the subdivision for emergency services will be met by present personnel and facilities.

Environmental Assessment Page 14 of 17

The Flathead County Sherriff's Office provides a standard comment that they can meet the demands of the future growth but response times vary or may be slow depending on where personnel happen to be when the call comes in and how many officers are available at the given time.

h. Schools:

- Identify the School Districts and describe the available educational facilities which would service this subdivision;
 - The subdivision lies within the Somers School District #8 for K-12 grades, and the Bigfork High School Districts. According to the Flathead County Superintendent of Schools Statistical Report (2019), there were 594 students attending Somers School district (K-8) in the Fall of 2019 and 342 students attending Bigfork High School in the Fall of 2019⁷.
- Estimate the number of school children that will be generated from the proposed subdivision;
 - The proposed subdivision is estimated to generate two additional students to the K-12 schools system based on 0.31 school aged children per residence. The estimate of 0.31 children per residence is based on the Flathead County Superintendent of Schools Office reporting 14,753 students at the beginning of the 2011 school year, including public, private and home-schooled children. The US Census Bureau 2010 counted 46,963 housing units in Flathead County. Thus, 14,753 students / 46,963 housing units, = 0.31 students / house.
- iii. The subdivider shall discuss the impact of the proposed development on the provision of educational services with the administrator(s) of the appropriate school system(s). The subdivider shall provide a written statement outlining whether the increased enrollment can be accommodated by the present personnel and facilities and by the existing school bus system, any recommendations of the administrator(s), and any mitigation planned to overcome any adverse impacts of the proposed development on the provision of educational services.
 - Since the increase in school children from this subdivision is estimated be two students, no effort was made to evaluate the impact on the school system as a result on this subdivision.

i. Land Use:

- Describe comprehensive planning and/or land use regulations covering the proposed subdivision or adjacent land and if located near the jurisdictional area of an incorporated city or town, whether annexation is proposed;
 - The proposed subdivision is not near an incorporated town and will not be annexed into one. It is unzoned. The subdivision is located in Flathead County and therefore part of the Flathead County Growth Policy (2012 update). The property is not located within any neighborhood plans in the growth policy. The growth policy is not a regulatory document (Preface, Part 4 of the Flathead County Growth Policy).

Environmental Assessment Page 15 of 17

⁷ https://flathead.mt.gov/schools/downloads.php

- ii. Describe how the subdivision will affect access to any public lands. Where public lands are adjacent to or near the proposed development, describe present and anticipated uses for those lands; (e.g., grazing, logging, recreation, etc.);
 The subdivision is not adjacent to public lands. The subdivision will not have an effect on access or use of public lands.
- iii. Describe the effect of the subdivision on adjacent land use;

 The proposed subdivision will create a total of five residential lots. The lots are 10.19 acres or larger and will be for single-family use. There are no proposed covenants and the single-family home uses will not conflict with the adjacent land uses. The effects of this subdivision on adjacent land use will be negligible.
- iv. Describe any health or safety hazards on or near the subdivision, such as mining activity or potential subsidence, high pressure gas lines, dilapidated structures or high voltage power lines. Any such conditions should be accurately described, and their origin and location identified. List any provisions that will be made to mitigate these hazards.
 None of the above described health or safety hazards have been identified on or near the subdivision.

j. Housing:

- i. Indicate the proposed use(s) and number of lots or spaces in each:
 - A. For residential indicate the type of dwelling unit;

 The proposed development will consist of five single-family living units.
 - B. For all other uses the type and intensity of use (e.g. industrial, commercial, etc.). Only residential development is proposed in this subdivision.

k. Parks and Recreation Facilities:

 Describe park and recreation facilities to be provided within the proposed subdivision and other recreational facilities which will serve the subdivision. <u>The proposed subdivision is not required to provide parkland because the lot sizes exceed 5</u> acres. Flathead County has access to many city, county, state, and federal lands for recreating.

Public Health and Safety:

i. Describe any probable impacts and any measures to mitigate the impacts, or submit a statement explaining why no impact is anticipated, providing documentation to support that statement that might affect public health and safety that aren't specifically addressed in other sub-section of the environmental assessment;
Other than those impacts described in this environmental assessment, there are no other known impacts that might affect public health and safety as a result of this subdivision. No additional mitigation has been identified or deemed necessary.

References

http://dnrc.mt.gov/divisions/water/operations/docs/dam-safety/technical-references/seismic-maps/plate_01.pdf

Prepared by:

406 Engineering, Inc.

Acknowledged by:

Developer

Loren Smith

Project Manager

Sandra O' Connell

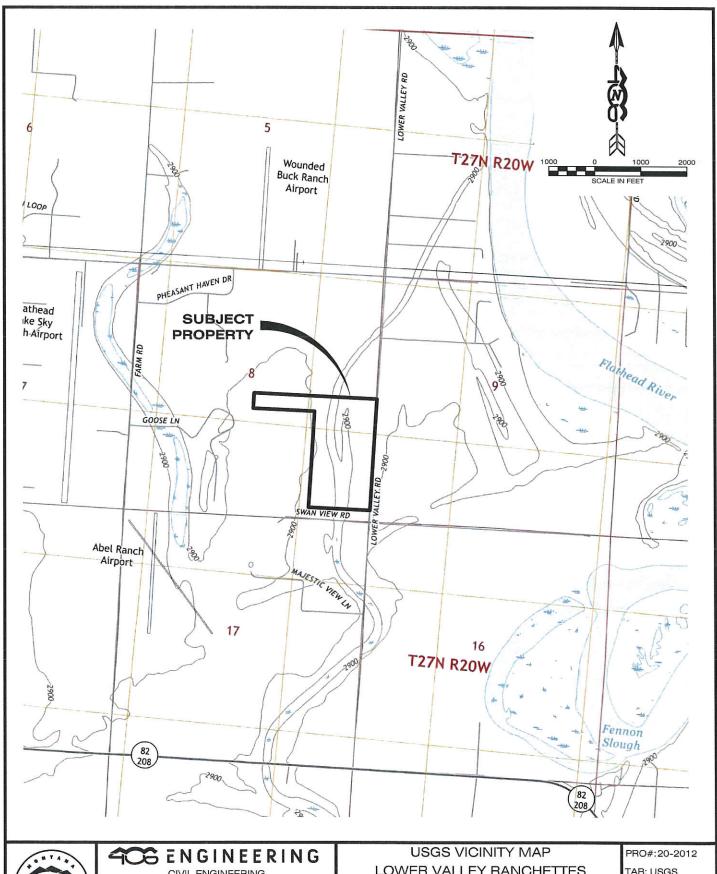
Jandra O'conneg

Owner

ATTACHMENTS

- ✓ USGS Map (1 page)
- √ Aerial Photo (1 page)
- ✓ UDSA Soils Map and Info (3 pages)
- ✓ United States Seismic Zones Map (1 page)
- ✓ State Historic Preservation Office email (1 page)
- ✓ Portions of the Montana Natural Heritage Program Environmental Summary report (3 pages)

https://406engineeringinc.sharepoint.com/Shared Documents/406 Work/1_Projects/2020 Projects/20-012 Sandy O'Connell 3500 Lower/4_PLANNING/2.Pre Plat App/Sec B/rpt.2020-05-08.ea.docx Wednesday, June 3, 2020, 3:19 PM



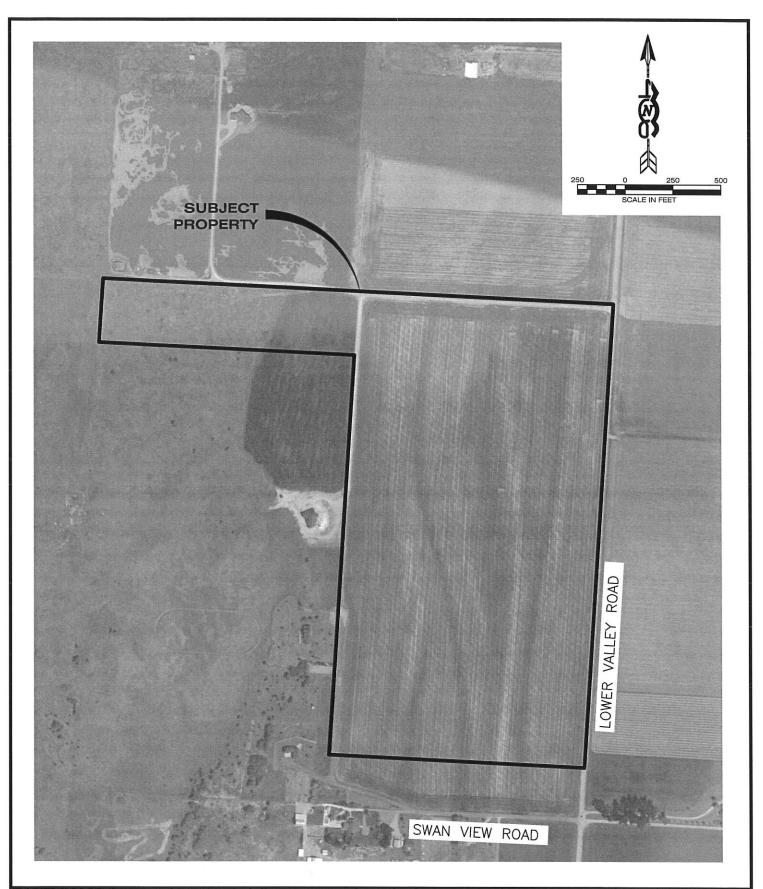


CIVIL ENGINEERING LAND USE CONSULTING

1201 S. 6th St. W. Missoula, MT 59801 (406) 317-1131

35 8th St. E. Kalispell, MT 59901 (406) 257-0679 www.406engineeringinc.com

LOWER VALLEY RANCHETTES 52 SWAN VIEW ROAD SEC 08, T27N, R20W FLATHEAD COUNTY, MONTANA TAB: USGS DRAFTER:LS DATE: 03/24/2020 SHEET 1 OF 1





405 ENGINEERING

CIVIL ENGINEERING LAND USE CONSULTING

1201 S. 6th St. W. Missoula, MT 59801 (406) 317-1131 35 8th St. E. Kalispell, MT 59901 (406) 257-0679

www.406engineeringinc.com

AERIAL MAP
LOWER VALLEY RANCHETTES
52 SWAN VIEW ROAD
SEC 08, T27N, R20W
FLATHEAD COUNTY, MONTANA

PRO#:20-2012 TAB: AERIAL DRAFTER:LS DATE: 03/24/2020

SHEET 1 OF 1

DWG LOCATION: E:\406\PROJECTS\OCONNELL\8_DRAFTING\8.1_DRAWINGS\CIV-20-012.DWG

MAP LEGEND

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

V

Δ

Water Features

Transportation

Background

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines
Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

X Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

▲ Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

+ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

SASTERIAL STORMAN CONTRACTOR

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

MAP INFORMATION

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

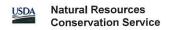
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Upper Flathead Valley Area, Montana Survey Area Data: Version 15, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 27, 2014—Nov 2, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cd	Corvallis silty clay loam, 0 to 3 percent slopes	7.5	7.5%
Kt	Kalispell loam, moderately deep over sand, 12 to 40 percent slopes	6.7	6.7%
Sd	Somers silt loam, 0 to 3 percent slopes	4.5	4.5%
Sg	Somers silty clay loam, 0 to 3 percent slopes	61.7	61.9%
Th	Tuffit-Somers silty clay loams, 0 to 5 percent slopes	19.3	19.4%
Totals for Area of Interest		99.6	100.0%



Loren Smith

From:

Murdo, Damon <dmurdo@mt.gov>

Sent:

Wednesday, April 1, 2020 1:35 PM

To:

Loren Smith

Subject:

RE: MSHPO File Search Request

Attachments:

2020040105.pdf



April 1, 2020

Loren Smith 406 Engineering Inc. 35 8th Street East Kalispell MT 59901

RE: LOWER VALLEY RANCHETTES, FLATHEAD COUNTY. SHPO Project #: 2020040105

Dear Loren:

I have conducted a cultural resource file search for the above-cited project located in Section 8, T27N R20W. According to our records there have been no previously recorded sites within the designated search locale. The absence of cultural properties in the area does not mean that they do not exist but rather may reflect the absence of any previous cultural resource inventory in the area, as our records indicated none.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

As long as there will be no disturbance or alteration to structures over fifty years of age, we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project, we would ask that our office be contacted, and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo Cultural Records Manager State Historic Preservation Office

File: LOCAL/SUBDIVISION/2020



MONTANA

Natural Heritage Program 1515 East 6th Avenue Helena, MT 59620 (406) 444-5363

mtnhp.org



Longitude

48.09271 -114.13779 48.14151 -114.20171 Summarized by: 027N020W008 (Buffered PLSS Section)



Suggested Citation

Montana Natural Heritage Program. Environmental Summary Report. for Latitude 48.09271 to 48.14151 and Longitude -114.13779 to -114.20171. Retrieved on 3/31/2020.

The Montana Natural Heritage Program is a program of the Montana State Library's Natural Resource Information System. It is operated as a special program under the Office of the Vice President for Research and Creative Scholarship at the University of Montana, Missoula.

The Montana Natural Heritage Program is part of NatureServe - a network of over 80 similar programs in states, provinces and nations throughout the Western Hemisphere, working to provide comprehensive status and distribution information for species and ecosystems.









Natural Resource Information System operated by the University of Montana.

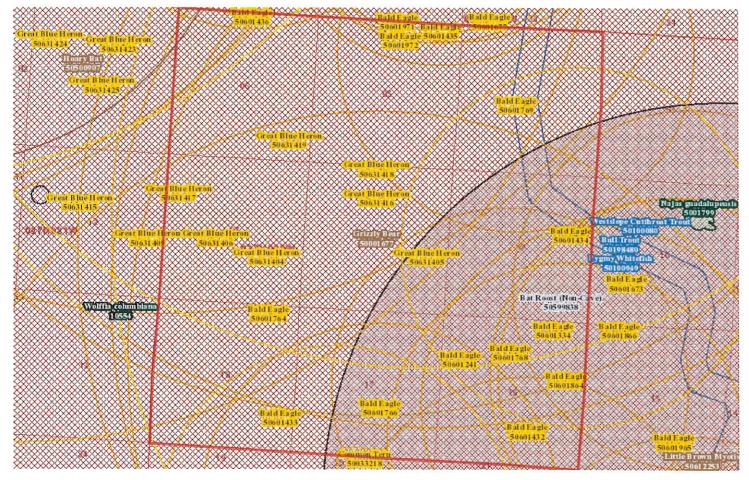
Habitat Icons Common Occasional	Range Icons Introduced Y Year-round S Summer W Winter Migratory	Num Obs Count of obs wil 'good precision' (<=1000m) + indicates additional 'poor precision' obs
	Common	Common Introduced Cocasional Year-round Summer Winter

Latitude Longitude 48.09271 -114.13779 48.14151 -114.20171

Native Species

Summarized by: 027N020W008 (Buffered PLSS Section) Filtered by:

MT_Status='Species of Concern', 'Special Status', 'Important Animal Habitat', 'Potential SOC'



Species Occurrences

	USFWS Sec7		# Obs	Predictive Model	Associated Habitat	Range
F-Bull Trout (Salvelinus confluentus) SOC	7	1		10000	Not Assigned	THE RESERVE OF THE PARTY OF THE
View in Field Guide						
Species of Concern - Native Species Global: G5 State: S2 USFWS: LT; CH USFS: Threatened, Critical Habitat on Forests (BD, BRT, HLC, KOOT, LOLO) BLM: THREA	TENED FWP S	WAP: S	GCN2			
<u>Delineation Criteria</u> Stream reaches and standing water bodies where the species is believed biologist, potentially supported by habitat assessment, direct capture, or confirmed presence in a terrestrial habitats to survival, stream reaches are buffered 100 meters, standing water bodies go bodies less than 1 acre are buffered 30 meters into the terrestrial habitat based on PACFISH/INF	djacent areas. reater than 1 a	In ord	buffer	flect the im ed 50 mete	portance of a	diacent
standards. (Last Updated: Mar 30, 2018)	Torritaparion o	3113014	adon A			
		JIISCI V	adoli Al			
standards. (Last Updated: Mar 30, 2018)		1	la de la companya de		Not Assigned	M
standards. (Last Updated: Mar 30, 2018) Predictive Models: 28% Suitable (native range) (deductive) F-Pygmy Whitefish (Prosopium coulteri) SOC View in Field Guide View Predicted Models View Range Maps		1		F	Not Assigned	M
standards. (Last Updated: Mar 30, 2018) Predictive Models: № 28% Suitable (native range) (deductive) F-Pygmy Whitefish (Prosopium coulteri) SOC	through direct c ent areas. In ord ding water bodi	1 apture der to ress less	or whe	re they are	believed to lace of adjace	oe present nt terrestr
standards. (Last Updated: Mar 30, 2018) Predictive Models: № 28% Suitable (native range) (deductive) F-Pygmy Whitefish (Prosopium coulteri) SOC View in Field Guide	through direct c ent areas. In ord ding water bodi	1 apture der to ress less	or whe	re they are	believed to lace of adjace	oe present nt terrestr

View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5T4 State: S2 USFS: Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO) BLM: SENSITIVE FWP SWAP: SGCN2 Delineation Criteria Stream reaches and standing water bodies where the species presence has been confirmed through direct capture or where they are believed to be present based on the professional judgement of a fisheries biologist due to confirmed presence in adjacent areas. In order to reflect the importance of adjacent terrestrial habitats to survival, stream reaches are buffered 100 meters, standing water bodies greater than 1 acre are buffered 50 meters, and standing water bodies less than 1 acre are buffered 30 meters into the terrestrial habitat based on PACFISH/INFISH Riparian Conservation Area standards. (Last Updated: Mar 30, 2018) Predictive Models: N 28% Suitable (native range) (deductive) ☐ B - Great Blue Heron (Ardea herodias) SOC 12 YS View in Field Guide View Predicted Models View Associated Habitat View Range Maps Species of Concern - Native Species Global: G5 State: S3 USFWS: MBTA FWP SWAP: SGCN3 Delineation Criteria Confirmed nesting area buffered by a minimum distance of 6,500 meters in order to be conservative about encompassing the areas commonly used for foraging near the breeding colony and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Mar 24, 2020) Predictive Models: 2 9% Optimal (inductive), 2 11% Moderate (inductive), Le 60% Low (inductive) Associated Habitats: 8 8% Common ☐ B - Bald Eagle (Haliaeetus leucocephalus) SSS View in Field Guide View Predicted Models View Associated Habitat View Range Maps Special Status Species - Native Species Global: G5 State: S4 USFWS: DM; BGEPA; MBTA; BCC10; BCC11; BCC17 USFS: Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO) BLM: SENSITIVE PIF: 2 Delineation Criteria Confirmed nesting area buffered by a minimum distance of 2,000 meters in order to be conservative about encompassing the breeding territory and area commonly used for renesting and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Mar 30, 2020) Predictive Models: 2 3% Optimal (inductive), 33% Moderate (inductive), 6 64% Low (inductive) Associated Habitats: 13% Common, 28% Occasional M - Hoary Bat (Lasiurus cinereus) SOC View in Field Guide View Predicted Models View Associated Habitat View Range Maps Species of Concern - Native Species Global: G3G4 State: S3 FWP SWAP: SGCN3 <u>Delineation Criteria</u> Confirmed area of occupancy based on the documented presence (mistnet captures, definitively identified acoustic recordings, and definitively identified roosting individuals) of adults or juveniles during the active season. Point observation location is buffered by a minimum distance of 3,500 meters in order to be conservative about encompassing the maximum reported foraging distance for the congeneric Lasiurus borealis and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: May 14, 2019) Predictive Models: 🔣 48% Moderate (inductive), 🗓 52% Low (inductive) 🛮 Associated Habitats: 🕎 19% Common, 🗖 81% Occasional M - Grizzly Bear (Ursus arctos) SOC 7 View in Field Guide View Predicted Models View Associated Habitat View Range Maps Species of Concern - Native Species Global: G4 State: S2S3 USFWS: PS: LT; XN USFS: Threatened on Forests (BD, CG, HLC, KOOT, LOLO) BLM: THREATENED FWP SWAP: SGCN2-3 Delineation Criteria Species Occurrence polygons represent the greatest extent of 1) Recovery Zone Boundaries, 2) Demographic Monitoring Areas, and 3) Current Known Distribution within Montana as defined in the 2018 Grizzly Bear Recovery Program annual report. This includes the Bitterroot Recovery Zone, which is not currently occupied by a resident population of Grizzly Bears. (Last Updated: Jul 05, 2019) Predictive Models: 485% Low (inductive) Associated Habitats: 14% Common ☐ B - Common Tern (Sterna hirundo) SOC View in Field Guide View Predicted Models View Associated Habitat View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN3 PIF: 2 Delineation Criteria Standing water bodies with evidence of nesting buffered by 100 meters in order to reflect importance of adjacent terrestrial habitats to breeding success. (Last Updated: Jul 02, 2019) Predictive Models: 4 14% Low (inductive) Associated Habitats: 8 8% Common □ O - Bat Roost (Non-Cave) (Bat Roost (Non-Cave)) IAH View in Field Guide Important Animal Habitat - Native Species Global: GNR State: SNR Delineation Criteria Confirmed area of occupancy based on the documented presence of adults or juveniles of any bat species at non-cave natural roost sites (e.g. rock outcrops, trees), below ground human created roost sites (e.g. mines), and above ground human created roost sites (e.g., bridges, buildings). Point observation locations are buffered by a distance of 4,500 meters in order to encompass the 95% confidence interval for nightly foraging distance reported for Townsend's Big-eared Bat (a resident Montana bat Species of Concern) and otherwise by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Oct 22, 2019)

JUN 3 0 2020